

CLAIMS

What is claimed is:

1. A Behind The Ear (BTE) Implantable Cochlear Stimulation (ICS) system, comprising:
 - a BTE unit of an ICS system;
 - an earhook configured to be removably attachable to the BTE unit;
 - a bendable, formable stalk attached to the earhook for directing the microphone to the inside of an ear; and
 - a microphone assembly attached to the stalk.
2. The system of Claim 1, wherein the microphone is configured to be electrically connected to a speech processor of the ICS system.
3. The system of Claim 2, wherein the microphone includes three terminals and wherein the microphone is configured to be electrically connected to the speech processor using three conductors.
4. The system of Claim 3, wherein the three conductors include a first conductor, a second conductor, and a third conductor, and wherein the first conductor is connected to a mating connector and wherein the second and third conductors are connected to a bias setting resistor.
5. The system of Claim 1, wherein the microphone assembly further comprises a filter at the distal end of the microphone assembly, wherein the filter seals the microphone from the environment.

6. The system of Claim 1, wherein the stalk is formed of shrink tubing.
7. The system of Claim 1, wherein the microphone assembly further includes a sleeve and wherein the microphone resides in the sleeve.
8. A Behind The Ear (BTE) Implantable Cochlear Stimulation (ICS) system, comprising:
 - a BTE device;
 - an In The Ear (ITE) microphone;
 - means for electrically connecting the ITE microphone to the BTE device; and
 - means for securing the ITE microphone in the ear, wherein the means for securing includes at least one stiffening member.
9. The system of Claim 8 wherein the microphone is secured in the ear so that when the earpiece of a communications handset is held to the ear, the port is open to the volume between the earpiece and the ear.
10. The system of Claim 9 wherein the communications handset is a telephone handset.
11. The system of Claim 8 wherein the means for securing the microphone comprises a stalk adapted to connect the microphone to the BTE ICS system.
12. The system of Claim 11 wherein the stalk is adapted to be bendable and to retain the bend once bent, thereby adjusting the position of the microphone.

13. The system of Claim 11 wherein the stalk is adapted to connect the microphone to an earhook, and wherein the earhook is removably attachable to the BTE ICS system.

14. The system of Claim 13 wherein the earhook is removably attachable to a coaxial connector attached to the case of the BTE ICS system.

15. A Behind The Ear (BTE) Implantable Cochlear Stimulation (ICS) system comprising:

- a BTE device including a speech processor;

- a microphone, wherein the microphone converts audio sounds into electrical signals which are processed by the speech processor to generate signals provided to an implantable circuit adapted to generate electrical pulses to stimulate nerves in the cochlea;

- means for positioning the microphone to receive sound from a volume between an ear and the earpiece of a communications handset held to the ear; and

- means for electrically connecting the microphone to the speech processor.

16. The system of Claim 15, wherein the speech processor is a Behind The Ear (BTE) speech processor and wherein the means for positioning the microphone comprises a stalk adapted to connect the microphone to the BTE speech processor.

17. The system of Claim 16, wherein the stalk is adapted to be bendable and to retain a bent shape.

18. The system of Claim 17, further including an earhook wherein the stalk connects between the microphone and the earhook, and wherein the earhook is removably attachable to the BTE speech processor.

19. The system of Claim 18, wherein the earhook is removably attachable to a coaxial connector attached to the case of the BTE speech processor.

20. The system of Claim 15, wherein the microphone includes a port, wherein when the earpiece of the communications handset is held to the ear, the port is open to the volume between the earpiece and the ear.